MINOR MODIFICATION TO COVERED SOURCE PERMIT REVIEW FOR CSP NO. 0255-01-C APPLICATION NO. 0255-02

Facility Title: Honolulu Resource Recovery Venture (HRRV) or

Honolulu Program of Waste Energy Recovery (HPOWER)

91-174 Hanua Street

Kapolei, Hawaii (Oahu) 96707

UTM coordinates 592390 meters east, 2356470 meters north.

Applicant: Honolulu Resource Recovery Venture

Responsible Official: Mr. Leon Brasowski Point of Contact: Robert Webster

Vice President of Environmental Permitting or Glenn Kashiwabara /

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Company's Mailing Address: 91-174 Hanua Street

Kapolei, Hawaii 96707

Amendment:

There are two (2) proposed amendments in the application.

1. The permittee is requesting to amend the opacity requirements for the MWC boilers as allowed by state rules for warm-up, start-up, shut-down, or malfunction (WSSM) periods. NSPS limits the opacity to 10% (except during WSSM periods when all emission limits do not apply). Currently, the permit integrates the state rule by limiting the opacity during WSSM to greater than 10% to 60% for not more than one 6-minute average in any 60-minute period.

Since state rules allow opacity up to 20%, HPOWER is requesting to amend the opacity limits during WSSM periods to between 20% and 60% for not more than one 6-minute average in any 60-minute period and up to 20% for the entire duration of the WSSM period. WSSM periods are defined in NSPS Eb and CSP No. 0255-01-C as the following:

- a. Warm-up (12 hours);
- b. Start-up (3 hours);
- c. Shut-down (3 hours); and
- d. Malfunction (3 hours)
- 2. The permittee is also requesting to burn used cooking oil directly to the boilers' burners during warm-up and start-up periods. Currently, the permit allows used cooking oil to be mixed in with the RDF only.

Issues:

1. The original opacity conditions were created to simplify the wording.
Unknowingly, this condition became too stringent at times. HPOWER has
experienced several occurrences, during WSSM, when the opacity exceeded
10%, but less than 20%, for more than one 6-minute average in one 60-minute

period. There are no Federal opacity requirements during WSSM for MWCs and State opacity requirements allow up to 20% opacity.

Allowing HPOWER to emit up to 20% opacity during WSSM will not increase any emissions since none of the emission limits will be changed. Therefore, there will be no change in Federal or State applicability.

2. The ability to burn used cooking oil via the boilers' burners will give Hawaii another option to dispose large quantities of the unwanted product. Used cooking oil is generally cleaner to burn than fuel oil no. 2. Also, used cooking oil was already allowed to be burned with the RDF. Furthermore, there will not be any increase in emissions since none of the emission limits will be changed and the total liquid fuel limit will not change.

New Permit Conditions:

The following revised permit conditions are proposed (Ramseyer format - new language is <u>underlined</u> while deleted language is [bracketed]:

The following Special Condition No. C.2 in Attachment IIA, issued with CSP No. 0255-01-C dated January 3, 2001, is superseded as follows:

2. MWCs

a. The MWCs shall be fired only on RDF, fuel oil no. 2, specification (spec) used oil, <u>used cooking oil</u>, or any combination thereof, except for the Alternate Operating Scenarios listed in Attachment IIA, Special Condition No. C.2.i.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

b. The maximum firing rate of <u>auxiliary fuel</u> (fuel oil no. 2, spec used oil, and <u>used cooking oil</u>) per MWC shall not exceed 1,770 gallons per hour.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

c. The total <u>auxiliary fuel (fuel oil no. 2, spec used oil, and used cooking oil)</u> consumption of each MWC shall not exceed 1,738,500 gallons in any rolling twelve (12) month period.

(Auth.: HAR §11-60.1-3, §11-60.1-90)

The following Special Condition No. D.1.a in Attachment IIA, issued with amendment to CSP No. 0255-01-C dated December 21, 2001, is superseded as follows:

a. For any six (6) minute averaging period, the MWCs shall not exhibit visible emissions greater than ten (10) percent, except <u>during warm-up</u>, <u>start-up</u>, <u>shut-down</u>, or <u>malfunction periods</u>. [as follows: during warm-up, start-up, shut-down, or malfunction, the MWCs may exhibit visible emissions greater than ten, but not exceeding sixty (60) percent opacity for a period aggregating not more than six

minutes in any sixty (60) minutes.]

During warm-up, start-up, shut-down, or malfunction periods, for any six (6) minute averaging period, the MWCs shall not exhibit visible emissions twenty (20) percent opacity or greater except as follows: during warm-up, start-up, shut-down, or malfunction periods the MWCs may exhibit visible emissions greater than twenty (20) percent opacity, but not exceeding sixty (60) percent opacity for a period aggregating not more than six (6) minutes in any sixty (60) minutes.

The following Special Condition Nos. E.14.a and b in Attachment IIA, issued with CSP No. 0255-01-C dated January 3, 2001, are superseded as follows:

14. Fuel Usage

a. A non-resetting fuel meter (in gallons) shall be operated and maintained on each MWC for the continuous and permanent recording of the total fuel oil consumed. Each meter shall permanently record the total fuel oil consumed for the purpose of monitoring the fuel oil limitations specified in Attachment IIA, Special Condition Nos. C.2.b and c. The permittee shall periodically check the fuel meter for its accuracy and provide maintenance as necessary.

Spec used oil and used cooking oil consumption shall be manually calculated and recorded in gallons per hour and gallons per rolling twelve (12) month period for the purpose of monitoring the fuel oil limitations specified in Attachment IIA, Special Condition Nos. C.2.b and c.

- b. The following information shall be recorded for the fuel oil consumption meter reading for each MWC:
 - 1) Date of meter readings:
 - 2) Beginning and ending meter readings for each hour;
 - 3) Total fuel oil consumption for each hour:
 - 4) Beginning and ending meter readings for each month;
 - 5) Total fuel oil consumption for each month; and
 - 6) Total fuel oil consumption on a rolling twelve (12) month basis.

The following Special Condition No. F.4.c.3) in Attachment IIA, issued with CSP No. 0255-01-C dated January 3, 2001, is superseded as follows:

3) The permittee shall report the monthly and rolling twelve (12) month total of fuel oil no. 2, spec used oil, <u>and cooking oil</u> consumed per MWC. The maximum hourly fuel consumption (per MWC) shall be noted in the comment column for each month. The enclosed *Monitoring Report Form:* [Fuel Oil] <u>Auxiliary Fuel</u> Consumption shall be used (one form per MWC for the total fuel oil no. 2, spec used oil, and cooking oil consumption).

The *Monitoring Report Form: Fuel Oil Consumption* issued with CSP No. 0255-01-C dated January 3, 2001, is superseded to replace fuel oil conditions with updated auxiliary fuel conditions.

Conclusion and Recommendation:

The facility will continue to comply with all State and Federal laws, rules, regulations, and standards with regards to air pollution.

Therefore, an amendment to CSP No. 0255-01-C for HPOWER is recommended subject to the following:

- 1. Above permit conditions; and
- 2. 45-day EPA review.